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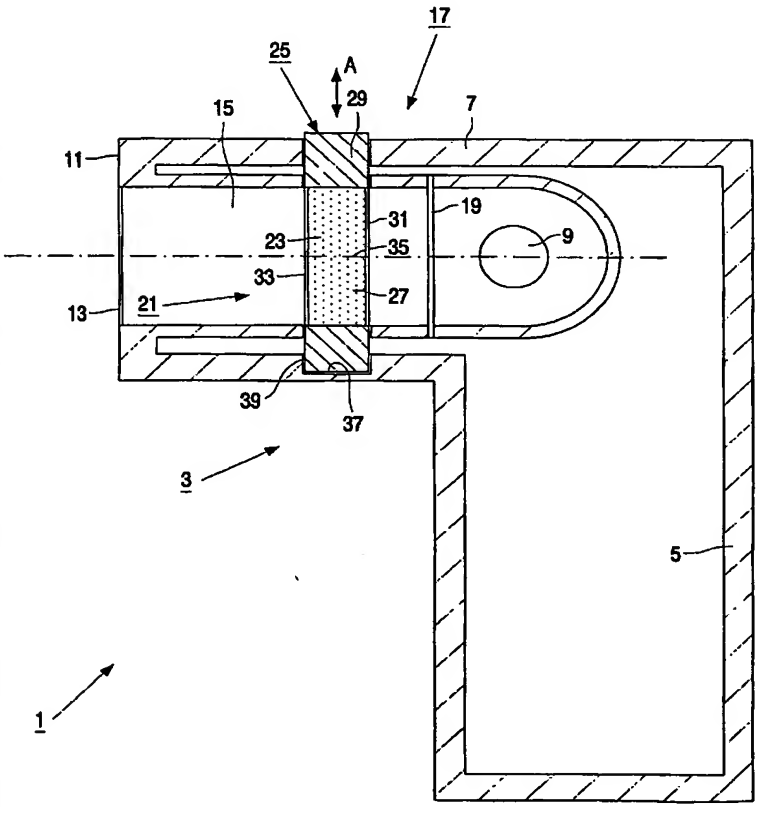
(54) Title: A DEVICE FOR TREATING HUMAN SKIN BY MEANS OF RADIATION



(57) Abstract: The invention relates to a device (1) for treating human skin by means of radiation. The device has a housing (5) with a radiation exit opening (13), a radiation source (9) which is accommodated in the housing, and a radiation path (15) between the radiation source and the radiation exit opening. A radiation filter (17) is provided in the radiation path. According to the invention the radiation filter (17) comprises water (23) which is in solid state at least during an initial phase of operation of the device (1). The water in solid state has an optical transmission spectrum which corresponds to the optical transmission spectrum of water in liquid state as present in the skin. As a result the water in solid state acts as an ideal filter for the IR light and near IR light, which would otherwise be absorbed by the water in the skin and cause unwanted heating of the skin. An additional advantage of the water in solid state is its relatively high heat absorbing capacity and its ability to cool the skin in case of direct thermal contact with the skin. In a particular embodiment the device (1) is an epilator for the removal of hairs from the human skin, the radiation source (9) being a flash lamp which generates light pulses having a high energy density and a broad optical spectrum.

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